

REMARKS

Favorable reconsideration and allowance of the subject application are respectfully solicited.

Claims 1, 3, 4, 7-11, and 13-15 are pending in the application, with Claims 1 and 11 being independent. Claims 1 and 11 are amended herein to recite the feature of Claims 2 and 12. Claims 2 and 12 are cancelled without prejudice to or disclaimer of their subject matter, and the dependencies of Claims 3, 9 and 13 are amended accordingly. It is submitted that no new matter has been added by the amendments herein.

Claims 1, 7-11 and 15 were rejected under 35 U.S.C. § 102(b) as allegedly anticipated by JP 55-139741 ("JP '471"). Claims 1, 11 and 15 were rejected under 35 U.S.C. § 102(b) as allegedly anticipated by Keaveney et al. (U.S. Patent No. 5,114,479). Without conceding the propriety of these rejections, Applicants note that they are moot in view of the amendment of independent Claims 1 and 11 to recite the feature of Claims 2 and 12, which are not included in these rejections.

Claims 2-4 and 12-14 were rejected under 35 U.S.C. § 103(a) as allegedly obvious over either of JP '471 or Keaveney et al., in view of EP 130789 ("EP '789"). Applicants respectfully disagree with these rejections.

Before addressing the merits of the rejections, Applicants believe it will be helpful to review some features and advantages of the claimed invention. The present invention, as recited in Claim 1, relates to an aqueous ink for ink-jet recording. The ink comprises a colored resin particle dispersed in an aqueous medium. The colored resin particle comprises a film-forming resin to which at least one of an oil soluble dye and a disperse dye is sublimed and

penetrated. The film-forming resin is an acrylic resin and has a minimum film forming temperature (MFT) of not higher than 35 °C. The present invention, as recited in Claim 11, relates to a coloring material comprising colored resin particles which comprise a film-forming resin to which at least one of an oil soluble dye and a disperse dye is sublimed and penetrated. The film-forming resin is an acrylic resin, and has an MFT of not higher than 35 °C.

In the present invention, colorants are caused to be sublimed by heating, thereby being absorbed in a polymer in a monomolecular state. In addition, the use of a polymer having an MFT of not higher than 35 °C makes it possible to evenly hold colorants dispersed in a resin in a monomolecular state on a paper sheet, as an image. Hence, not only excellent scratch resistance and ozone resistance can be realized, but also excellent coloring properties and transparency can be obtained. In Applicants' view, the cited references do not teach or suggest the claimed invention.

JP '471 and Keaveney et al. are cited for the feature that colorants are caused to be sublimed by heating in order to color polymers. However, as the Examiner has noted, these references do not teach or suggest use of a polymer having an MFT of not higher than 35 °C.

EP '789 discloses use of a polymer having an MFT of not higher than 35 °C. Applicants submit, however, that the coloring mechanism in EP '789 is not by sublimation of heated colorants, but by reaction between the cationic group of a basic colorant and the anionic sulfonic group of a polymer, (see, e.g., page 14, lines 16-18) and that these mechanisms are completely different from each other. Applicants further submit that, with a coloring mechanism such as that of EP '789, even when dyes are able to sublimate, the effect in the present

application, or in JP '471 or in Keaveney et al., cannot be obtained because the cationic dye and the anionic polymer react with each other.

Furthermore, the effect in EP '789 brought about by using a polymer having an MFT of not higher than 35 °C is an improvement in flexibility (see page 3, lines 2-10), which is different from the goals of the present invention.

The technique disclosed in JP '471 or Keaveney et al. is completely different from that in EP '789, and hence it is not seen that there is any motivation for one of ordinary skill in the art to combine EP '789 with either of the other two references.

Applicants submit that the cited references do not teach or suggest the invention as presently claimed in independent Claims 1 and 11, either singly or as combined by the Examiner, even if such combination were proper. The dependent claims are allowable for the reasons given with respect to their respective independent claims and because they recite features that are patentable in their own right. Reconsideration and withdrawal of the Section 102 and 103 rejections is respectfully requested.

Applicants submit that this application is in condition for allowance, and a Notice of Allowance is respectfully requested.

Applicants' undersigned attorney may be reached in our Washington, D.C. office by telephone at (202) 530-1010. All correspondence should continue to be directed to our below-listed address.

Respectfully submitted,



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